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| APPLICATION NO.                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/609,317                        | 06/27/2003  | Joseph Daniel Coenen | K-C 13485.1 7356    |                  |
| 75                                | 05/16/2005  |                      | EXAM                | INER             |
| Pauley Petersen Kinne & Erickson  |             |                      | PURVIS, SUE A       |                  |
| Suite 365<br>2800 W. Higgins Road |             |                      | ART UNIT            | PAPER NUMBER     |
| Hoffman Estates, IL 60195         |             |                      | 1734                |                  |

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Application No.  | Applicant(s)  |  |  |  |
|--|--|--|---------------|--|--|--|
| Office Action Summary  |  | 10/609,317   | COENEN ET AL. |  |  |  |
|  |  | Examiner   | Art Unit      |  |  |  |
| •  |  | Sue A. Purvis  | 1734          |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |  |               |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |  |               |  |  |  |
| Status   |  |  | ·             |  |  |  |
| 1)⊠  | 1) Responsive to communication(s) filed on 22 February 2005.   |  |               |  |  |  |
| ·  | This action is <b>FINAL</b> . 2b) This action is non-final.  |  |               |  |  |  |
| •  |  |  |               |  |  |  |
| Disposition of Claims  |  |  |               |  |  |  |
| <ul> <li>4)  Claim(s) 1-6,9-12 and 14-23 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) 1-6,9-12,14 and 22 is/are allowed.</li> <li>6)  Claim(s) 15-21 and 23 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |  |  |               |  |  |  |
| Application Papers   |  |  |               |  |  |  |
| 9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |  |               |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |               |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |  |  |               |  |  |  |
| 2) Notice 3) Inform  | (s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: |               |  |  |  |

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 15, 16, 18-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandon et al. (US Patent No. 5,818,719) in view of Instance (US Patent No. 5,674,334).

Brandon discloses a process and apparatus for controlling the registration of two layers of material. The process includes providing a first layer (54) and a layer of discrete components (32). The feed of the discrete components is monitored by a proximity switch (62). The components are placed upon the first layer in a spaced apart manner. (Col. 9, lines 6-26). Figure 8 shows the waveform (156) of the proximity switch reading. (Col. 15, lines 53-61).

Brandon et al. does not the use of reference marks on the first layer and synchronizing the feed rate of the discrete components based on the reference marks.

Instead Brandon et al. uses a proximity switch for monitoring and controlling the placement of the components in relation to a second layer (66) which does have reference marks thereon. Adhesive is selectively applied to the second layer (66) by applicator (98). (Col. 11, lines 29-43).

Instance teaches that by using markers on a continuously moving web and components being properly placed thereon. Instance discloses an apparatus for

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manufacturing labels where a continuously moving first layer (112) includes a plurality of pre-printed images which are equivalent to reference marks. A sensor (188) senses the reference marks and generates a signal thereby measuring the distance between the images. A plurality of continuously moving discrete components (122) are conveyed toward the first layer (112). Sensor (184) sends a signal to the pulse counter when a component (122) is detected in the feed system (126) thus sensing a distance between two successive components of the second layer. The sensor (188) operates in conjunction with a control system (not shown) to coordinate the application of the component (122) to the first layer (112) so that the component (122) coincide at the correct point on the web in registry with the printed image. Adhesive is applied to the upper surface of the web (112) by an adhesive applicator (186). The component sensor (184) or the web sensor (188) can be employed to trigger the application of adhesive to the web (112). (Figure 3; Col. 9, lines 1-31.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made that an additional means of control would be to add reference marks to the first layer as shown in Instance. This results in an additional means by which to control the placement of the components and insure proper placement and preventing mistakes in assembly. Instance teaches that such control is within the purview of one having ordinary skill in the art.

Brandon in view of Instance does not disclose the corrective step where the placement of components is corrected subsequent to superimposing the components on the first layer.

Weyenberg discloses an apparatus and method for registration control of assembled components. It includes a registration inspection apparatus (41) which communicates comparator (61) wherein the actual position of the components is compared with the

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desired position. The inspection apparatus of the invention provides the requisite quality control. (Col. 6, lines 24-36.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sensing means located after the discrete component is added to the first layer in Brandon in view of Instance for quality control purposes, as disclosed in Weyenberg. In particular, by inspecting the actual position of the component on the web, there is an additional step for quality control besides using the sensor (188) to align the label to the web.

Regarding claim 16, the apparatus of Brandon in view of Instance and Weyenberg includes a step of correcting the placement of the labels onto the web, thus meets the limitation of these claims.

Regarding claims 18-20, Weyenberg determines the positional relationships and compares them to the desired positional relationships and signals representing the deviation of the actual positional relationship from the desired positional relationship. The deviation is used in a feedback control to adjust the operation of the respective component supply means in order to maintain the position of that component in each article within its acceptable range. (Col. 3, lines 30-40.)

Regarding claim 21, in Brandon an additional layer (66), which is composed of two components (66, 92), is superimposed on the first layer and discrete components. (Figure 5.)

3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandon in view of Instance and Weyenberg as applied to claim 15 above, and further in view of Popp et al. (US Patent No. 5,932,039).

Brandon in view of Instance and Weyenberg does not disclose filtering out signal anomalies.

Popp discloses in conjunction with performing a running average of the measured counts, a filtering function is performed to filter out signal anomalies. Examples of signal anomalies include a dirty photoeye, missing or extra reference marks (74), movement or weaving of the layers, measuring the counts outside a preprogrammed range for averaging purposes, known inaccurate data due to registration control events, or the like. (Col. 16, lines 35-44.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a filtering step in Brandon in view of Instance and Weyenberg, because Popp teaches is it useful filter out signals which may be caused by a dirty photoeye or sensor.

## Response to Arguments

- 4. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
- 5. In response to applicant's argument that Instance is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Instance is pertinent to the problem which the applicant is concerned with. Instance deals with

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placement of labels or components on a web, in particular it is concerned with proper placement of the label on the web.

- 6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
- 7. In response to applicant's argument that Brandon's methodology is contrary to the teachings of Instance is unpersuasive, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).
- 8. Regarding applicant's arguments with respect to the recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

## Allowable Subject Matter

- 9. Claims 1-6, 9-12, 14, and 22 are allowed.
- 10. The following is an examiner's statement of reasons for allowance: Detailed in previous Office Action mailed 30 June 2004.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue A. Purvis whose telephone number is (571) 272-1236. The examiner can normally be reached on Monday through Friday 9am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A. Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sue A. Purvis Primary Examiner Art Unit 1734 Page 8

SP May 10, 2005